

597.7
Jan. 30, 1909

697.7

ELECTRIC HEATING

The Simplex Electrical Co.

(HEATING DEPARTMENT)

Sidney and Franklin Streets,
CAMBRIDGEPORT, MASS., U. S. A.

Sole Manufacturers under the patents of
THE AMERICAN ELECTRIC
HEATING CORPORATION

1137 Monadnock Building,
CHICAGO.

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THAT the electric heating industry is now firmly established as one of the important branches of electrical development, is due to serious efforts to apply the best available electrical and mechanical talent in producing an output. To-day we are able to offer the goods mentioned in the following pages with the assurance gained from experience, that they will be found durable, effective and efficient. We have had many commendations, but refrain from including them in our catalogue. To manufacturers interested we can refer to others in their vicinity who will gladly give them the benefit of their experience up to date.

PLEASE NOTE.

All articles listed are "non-inductive," consequently are equally effective on direct or alternating circuits. It is **VERY** important that the **ACTUAL VOLTAGE** of the circuit be given when ordering.

No articles listed, except Air Heaters, are made for a higher pressure than 120 volts, though some can be made to order for 220 and 500 volt circuits.

All goods using 200 Watts or less are supplied with Flexible Conductor and Lamp-Socket Plugs. Articles using more than 200 Watts do not have Lamp-Socket Plugs.

In addition to the goods listed, we manufacture many special forms of heaters for a variety of machine tools, and solicit correspondence for special applications of heat.

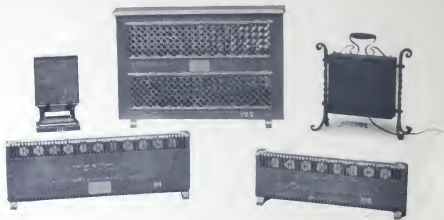


SHOW CASE ASSORTMENT.

TO enable dealers and lighting companies to keep displayed in an attractive manner an assortment of heating goods in popular demand, we have made a selection (listed below) with which we send the three-foot oak showcase illustrated above for \$25.00 net.

The articles listed in this assortment are moderate in price and of a character to interest any purchaser in the further use of electric heaters.

- One No. 1701 $4\frac{1}{2}$ inch stove, complete with cord and plug.
- One No. 1702 6 inch stove, with cord.
- One No. 1502 $4\frac{1}{2}$ lb. small seaming iron, with stand, cord and plug.
- One No. 1504 $6\frac{1}{2}$ lb. laundry iron, with stand and cord.
- One No. 1274 curling iron heater, with cord and plug.
- One No. 981 heating pad, with cord and plug.
- One No. 1721 aluminum stew pan
- One No. 901 plug switch complete.
- One No. 241 soldering iron.



ELECTRIC RADIATORS.

ELECTRIC RADIATORS.

UNLESS electricity is produced at a very low cost it is not commercially practicable to heat residences or large buildings. While this is true, the electric heater still has a wide field of application, in heating small offices, bathrooms, snuggeries, cold corners of rooms, street railway waiting rooms, the summer villa on cool evenings, and in mild climates a still wider range. It has the peculiar advantage of being instantly available, and the amount of heat is regulated at will. The heaters are perfectly clean, do not vitiate the atmosphere, and are portable.

No definite rule can be given to determine the amount of electricity necessary for heating a given space, though approximate estimates can be made by allowing from 1 to 2 watts for each cubic foot of air space to be heated. The latter amount for well-constructed buildings in cold weather, or for quickly heating a bathroom. The heaters shown are usually arranged to give three different adjustments of heat. Numbers 101, 102, 103, 110, 111 and 112 are made for any circuit up to 600 volts, and the others for any of the usual incandescent lighting voltages.

No.		Length	Height	Width	Maximum Watt Capacity	Price
101	Gold Bronze Finish	26 in.	22 in.	2 in.	2000	\$25.00
102	"	26 in.	22 in.	4 in.	4000	35.00
103	"	26 in.	22 in.	7 in.	6000	45.00
110	"	22 in.	8 in.	2 in.	770	12.00
111	"	26 in.	10½ in.	2 in.	1200	15.00
112	"	26 in.	10½ in.	4 in.	2400	20.00
1121	Black Japan Finish, 2 plates, each	7x8			1000	10.00
1122	Black Finished, ornamental iron	(See illustration)			800	15.00
1123	"	"	"	"	1200	25.00



PORTABLE STOVES.

PORTABLE STOVES

OR DISC HEATERS, have such a universal application and are so clearly illustrated that extended description is unnecessary. Their form is such that they can be used for heating anything that can be placed on a flat, hot surface, but it is important that the utensil used have a perfectly flat surface on the bottom for best results.

An important characteristic is that they are "hot" in about two minutes. The No. 1701 is $4\frac{1}{2}$ inches in diameter, and is designed to connect to a lamp socket, making it quickly available anywhere throughout the house, for heating small quantities of food or fluid. It is indispensable in the nursery or invalid's room. All stoves are mounted on enamelled slate, but have five feet of our special flexible cord and can be had from stock for circuits of 52-100-110 or 120 volts, alternating or direct current

No.		Capacity	Price
1700	$3\frac{1}{4}$ in. in diameter, special for dentists' use	50 Watts	\$5.00
1701	$4\frac{1}{2}$ " " " cord and lamp-socket plug	200 "	4.00
1702	6 " " " no plug	440 "	6.00
1703	7 " " " "	600 "	7.00
1704	8 " " " "	825 "	10.00
1705	10 " " " "	1100 "	13.00
1706	12 " " " "	1300 "	16.00
1708	15 " " " "	1800 "	21.00

STOVES WITH SWITCHES

For three heats are very desirable because the current can be reduced at will (thereby lessening cost of operation) and the heat is controlled.

No.		Maximum Current	Price
1731	$4\frac{1}{2}$ in. in diameter, cord and plug	200 Watts	\$6.00
1732	6 " " " " no "	440 "	8.50
1733	7 " " " " " "	600 "	10.50
1734	8 " " " " " "	825 "	13.50
1735	10 " " " " plug switch	1100 "	16.00
1736	12 " " " " " "	1300 "	19.00
1738	15 " " " " " "	1800 "	24.00
1742	6 " " nickel pltd., ornamental stand, very attractive	550 "	10.50
1743	7 " " same as No. 1742	660 "	12.50



TEA KETTLES.

TEA KETTLES AND STANDS.

.. JUST FOR TWO."

A handsome nickel plated copper Tea Kettle, especially adapted for use with the 4½ inch stove.

No.		Capacity	Price
1724	Stove and Kettle (1 pt.)	200 Watts	\$6.00
1726	Stove and Kettle (1 pt.)	200 Watts, 3 heats	8.00
1725	Kettle only (for stove No. 1701)		2.00

" FIVE O'CLOCK TEA "

With this very handsome combination one can complete the furnishings of a tea-table in keeping with its dainty silver, china and linen. The silent electric current quickly supplies the necessary heat without the use of alcohol, matches or flame, and also provides a stove (when the kettle is removed) on which to warm wafers or crackers, or with a suitable pan, make a Welsh rarebit. It is artistic in design, highly finished in silver or nickel plate. Can you find a more satisfactory present for a woman? Made for any electric lighting circuit.

No.		Capacity	Price
1872	One quart, nickel plated, 3 heats,	440 Watts	\$15.00
1873	" " silver " 3 "	440 "	20.00
1874	Two " nickel " 3 "	550 "	17 00
1875	" " silver " 3 "	550 "	22.00

DOMESTIC TEA KETTLES.

Tea kettles with heater contained in kettle are made in two sizes, two quarts and four quarts, respectively, of copper, nickel-plated, with hardwood handles.

No.		Price
851	Two quarts, 440 Watts	\$12.50
853	Four " 770 "	14.00

State voltage when ordering.



1724



1722



1720

ELECTRIC STEW PAN or EGG BOILER.

THIS is a universal utensil, very attractive in appearance, and has proved to be one of the most salable of electric heating devices. The heater consists of a $4\frac{1}{2}$ inch disc to which is fitted a (removable) aluminum stew pan with capacity of $1\frac{1}{2}$ pints. Just the thing to use in light housekeeping, exactly what is wanted in a physician's office, drug store, hospital, the nursery, or where a little food is to be cooked, a hot drink made, or small quantities of hot water required. Connects to any lamp-socket. Packed complete with cord and plug.

No.		Capacity.	Price.
1720	Heater and Aluminum Stew Pan	200 Watts	\$5.00
1728	" " " " " 3 heats	200 "	7.00

COFFEE POTS.

No. 1722 Coffee Pot is of the French type, made very substantially of copper, nickel plated. One quart capacity. It is removable, leaving the heater available for heating other vessels, toasting, etc. It is sent complete with cord and plug, ready to attach to any lamp socket.

No.		Capacity.	Price.
1722	Coffee Pot and Heater,	200 Watts	\$7.50
1727	Coffee Pot only,		3.50

In addition to above, we make a coffee pot of copper, nickel plated, of the French type, similar to above, except that the coffee pot proper is immersed in a hot water bath and the water is kept hot by an electric coil heater. Unlike the one described above, the heater cannot be used as a stove, but can be employed as a cooker for oatmeal, etc., by the addition of another vessel.

No.		Capacity	Price
256	Coffee Pot, Complete, with coil, 1 quart,	400 Watts	\$13.00

The Electric Tea Kettle shown in the illustration is No. 1726. listed on page 6.
State voltage when ordering.



CHAFING DISH.

ELECTRIC CHAFING DISH.

THE use of a chafing dish has become well-nigh universal; but how frequently does it happen that when the guests or family are waiting for the host to exhibit his skill, it is discovered there is no alcohol in the house?

The Electric Chafing Dish requires no alcohol, but is always ready for use. It is furnished in a graceful pattern, in the conventional form, of spun copper, highly finished in silver or nickel. A most acceptable present for any one. Adapted to any lighting circuit.

No.		Capacity	Price
203	Two quarts, nickel plated,	440 Watts	\$15.00
204	“ silver “	440 “	20.00

An electric heater can be applied to any chafing dish at an expense of from \$8.00 to \$10.00 and in most cases it can be so added that the alcohol lamp may be used if for any reason there is occasion. Those listed above are for electric heat only.

State voltage when ordering.

No.		Price
1723	An Aluminum Blazer for use with 6-inch Stoves (Blazer only),	\$1.75



FARINA BOILER.

FARINA BOILER.

THIS very useful device has proved to be the most convenient for a great variety of uses. The outer vessel is of heavy copper nickel plated, the inner being made entirely of porcelain. The heating coil (also nickeled) is in a water bath surrounding the porcelain pot in which the cooking is done. It is so constructed that all parts are easily separated as shown in the illustration.

Any little article of food prepared and served in an attractive manner is always more palatable, and this adds much to its enjoyment whether one is ill or well. For the many uses to which this cooker may be applied it is ideal. It is so designed that three divisions of heat may be obtained: the maximum to quickly heat up the vessel, then a less amount may be used to do the cooking or a still less amount to keep the contents of the vessel. Made for direct or alternating current, the usual voltages used for lighting.

No.		Maximum Watts	Price
353	One quart, three heats	440	\$12.00
354	Two quarts, "	660	13.50

State voltage when ordering.



1184 BROILER.



1423 GRIDDLE.

THE ELECTRIC BROILER.

THE Electric Broiler is made entirely of cast iron, is light, easily portable, and superior to any heretofore made. It is ready for use in twelve minutes after current is turned on, and will broil "to a turn" in from 10 to 15 minutes (according to thickness) one or two porter-house steaks or four to six chops. Made for 50, 100, 110, 120 volts.

No. 1184 Broiler, size 9x12 inches, two heats, if so ordered, Maximum Watts, 1300

\$15.00

GRIDDLE CAKE COOKERS.

These useful heaters are not only the best device ever used for griddle cake cooking, but are equally useful for cooking any food that may be prepared on a hot, flat surface, or they may be used as a stove for heating utensils, the surface temperature being about 700 degrees F. The absolutely constant, uniform high heat always produces a light, thoroughly cooked cake. The griddle is always "just right" and the operator cannot change it. Many of the large hotels use these exclusively.

No.		Price
1420	6 in. diameter	\$ 7.50
1422	9x12	12.00
1423	12x18 in., hotel, 1500 Watts	15.00
1424	12x18 in. " three heats	16.50

State voltage when ordering.



600 OVEN.

ELECTRIC OVENS.

NO one except the cook knows how much cooking is or may be done with the oven. From the delicious muffin at breakfast to the dainty pastry at dinner, all the products of flour as well as the roasts and innumerable food items by which we live, are cooked entirely in the oven.

The perfect results which are easily obtained with the electric oven are due to the arrangement of heat supply, which permits the temperature at the top, sides, or bottom to be independently changed at will while the general temperature of the oven is shown by its thermometer. Because the operation of each different switch produces a certain definite change in the heat supply, any one can with certainty reproduce results found by experience to be the best. No heat escapes to affect the temperature of the room. In common with all electric heating devices it is independent of all else and may be placed where most convenient and at a height to avoid the necessity of stooping to inspect its contents.

No. 600	One compartment with removable shelf, size inside 11x13½x17 inches deep — 3 heats in a variety of combinations — Maximum Watts 1500,	\$60.00
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State voltage when ordering.



661 PLATE WARMER.

PLATE WARMERS.

PLATE warmers heated by gas, oil or over furnace registers are positively dangerous if used to keep food warm, because the contents are exposed to the products of combustion or dust from furnace pipes. The perfect cleanliness of an electric plate warmer is enough to warrant their exclusive use.

We make one shown in the illustration, No 661, which is designed for use in dining room or pantry or for private service in rooms at hotels, cafes, etc.

It is made in a most substantial manner of heavy "block tin" with polished brass trimmings; the interior is divided by shelf; and a handle on the top makes it convenient to carry safely when filled. This type is used for private service at the Waldorf, Astoria, on private yachts, etc.

In addition to those shown we have supplied plate warmers and heaters for plate warmers for the pantries of many hotels, steam yachts and dwellings, as well as heaters for kitchen elevators and serving rooms. Estimates will be furnished on receipt of specifications for any special size.

No. 661 12x12x15 inches high, 300 Watts

\$20.00



HOT WATER URNS.

HOT WATER URNS.

BELOW are listed our standard hot water urns made of copper, heavy nickeled and are complete with switches arranged to give three divisions of heat. The maximum current is to be used when it is desired to quickly get hot water when starting with everything cold; when once hot the minimum current is sufficient to maintain the contents at about the boiling point. We can apply heaters to any of the standard coffee, tea or hot water urns in general use. Those having "water jackets" must be sent to us to be fitted. Plain urns we can send coils for, when capacity, inside depth and diameter of urn are given.

The one gallon urn has proven a very popular article for small restaurants, barber-shops, offices of tea-brokers and office building lunch rooms. It is quite ornamental.

No.		Price
1453	One gallon, plain top, black polished slate stand, nickel legs. Maximum Watts 550; Medium 225; Minimum 110	\$18.00
1455	Two gallons, plain top, three heats, same style as 1453. Maximum 660; Medium 440; Minimum 220	20 00
457	Three gallons, plain top, with water-glass, three heats. Maximum 1320; Medium 660; Minimum 330	35 00
458	Three gallons, platform top for glasses, with water-glass three heats. Maximum 1320; Medium 660; Minimum 330	40.00
459	Five gallons, plain top, with water-glass, three heats. Maximum 1760; Medium 880; Minimum 440	42 50
460	Five gallons, platform top for glasses, water-glass, three heats. Maximum 1760; Medium 880; Minimum 440	47 50



IMMERSION COILS.



IMMERSION DISCS.

IMMERSION COIL HEATERS.

THIS useful form of heater has many applications. It may be used for heating liquids contained in almost any kind of vessel, and has the advantage over any other form of liquid heater of communicating all the heat generated to the liquid. Coils are usually sent in cylindrical form, but they can be furnished in flat coils or to conform to the shape of vessels in which they are to be used. These heaters are also made for three divisions of heat, controlled with a switch on the coil. The amounts are maximum, one-half and one-quarter. By having this arrangement the highest economy is obtained in operation, the maximum being used to quickly heat up, and the minimum to maintain the temperature. The coils consist of copper tubes, varying from $\frac{1}{8}$ to $\frac{3}{4}$ inch in diameter, and are furnished either plain or nickeled. *They are made for 52 or 110 volts alternating or direct current, of such capacity as desired.*

No.		One Heat	Three Heats
470	Capacity, 100 to 440 Watts	\$6.50	\$8.00
471	" 440 " 660 "	7 50	9.00
472	" 700 " 880 "	8 50	10.00
573	" 900 " 1100 "	10.00	12.00

IMMERSION DISC HEATERS.

Copper, nickel-plated and polished; of the diameters given and about one inch thick. This type is desirable for some uses.

No.		One Heat	Three Heats	One Heat	Three Heats
1480	5 in. diameter.	200 Watts	400 Watts	\$8 00	\$10 00
1481	6 $\frac{1}{2}$ " "	400 "	800 "	12.00	14.50
1482	7 $\frac{1}{2}$ " "	500 "	1000 "	13.00	15.50

State voltage when ordering.



SMOOTHING IRONS.

ELECTRIC SMOOTHING IRONS.

UNLIKE all others except in form, are always clean, polished, and permit of continuous use. No time is lost in changing, cleaning, or useless rubbing with a cold iron, for they produce a "live heat" which is continuous. A greater amount of work can be done by an operator in a given time with more ease and comfort than is possible with any other iron. Electric irons remain "just right" and no hot coal or gas stoves are required. These irons have proven of great value in sewing rooms, laundries, and manufacturing establishments, and are deemed indispensable by those who have them (Shall we send you references?) We have equipped the laundries of many public institutions. Particular attention is called to the Small Seaming Iron, No. 1502, as it is especially suitable for laces, handkerchiefs and all similar light goods. Can be attached to any lamp socket (State kind of socket.) Each iron is supplied with a suitable stand on a slate base, and seven feet of duplex conductor. For additional length add 15 cents per foot to cost of iron. 50-100-110 or 120 volts as required.

No.		Watts	Price
1501	Troy Polishing	330	\$6.00
1502	Small Seaming (can be connected to lamp socket)	200	5.00
1503	Gentleman's Small Hat Iron	200	5.00
1504	6½ lbs Light Domestic	500	7.00
1504½	" " " round nose	500	7.00
1505	7½ " Domestic	600	7.50
1506	9 lbs Heavy Laundry	680	8.00
1507	9 " Hatters'	550	9.00
1508	9 " Corset	500	9.00
1509	15 " Hatters' Factory	550	11.00

SMOOTHING IRONS WITH AUTOMATIC CUT-OUT.

Irons with automatic cut-outs are desirable as they operate to stop the flow of current if the iron is carelessly left by the operator; are also useful to regulate the temperature while at work.

No.		Watts	Price	No.		Watts	Price
1511	Troy Polishing	330	\$8.50	1515	7½ lbs Laundry	600	\$10.00
1512	4½ lbs. Small Seaming	200	7.50	1516	9 " "	680	10.50
1514	6½ " Light Domestic	500	9.50	1517	9 " Hatters'	550	11.00
1514	½ " " "			1518	9 " Corset	500	11.00
				1519	15 " Hatters' Factory	550	11.00

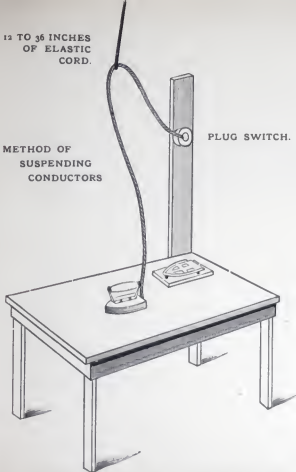


TAILORS' IRONS.

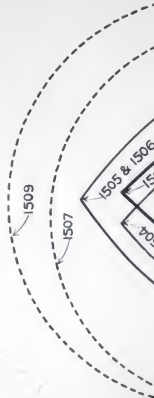
12 TO 36 INCHES
OF ELASTIC
CORD.

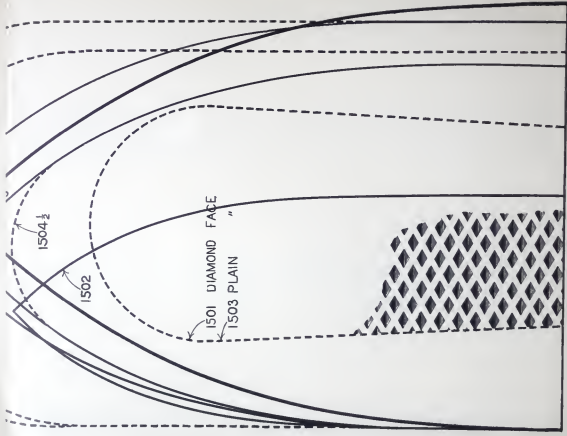
METHOD OF
SUSPENDING
CONDUCTORS

PLUG SWITCH.



Prevents breaking of conductors, and also frees the table
of cords.

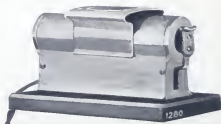




TAILORS' ELECTRIC IRONS.

IT has been shown by experience that nothing can compare with the results obtained in factories or shops with the electric goose. Aside from the reduced room temperature and improved sanitary condition, electric irons **DO MORE WORK AND DO BETTER WORK** than irons heated by any other method. Every rub counts; the iron is continuously heated **WHERE YOU WANT IT** and nowhere else; is always clean in every part, and there are no stoves or leaking gas tubes, no flame of matches required, and the supply of heat can be turned on or off at will. Well men can do more work than sick ones. With electric irons you can have well men operating tools that need never stop. This is the secret, they go all the time. It costs more under most conditions per iron **FOR HEAT**, but you can do more work in the same time with electric irons than any other. Seven feet of duplex conductor cord attached to each iron; if longer lengths are required, state so in ordering. Price for added length 15 cents per foot. Each hand iron is furnished with stand on slate base. Made for usual voltages; direct or alternating current.

No.			Watts	Price
1801	12	pound Goose	660	\$10.00
1802	15	" "	660	10 00
1803	18	" "	770	11.00
1804	20	" "	770	11.00
1805	14	" Machine Goose	770	10.50
1806	15	" " " oval nose, 4 in. wide	880	11.00
1807	15	" Goose, special broad shape	770	11.00
1808	25	" "	880	12.00
1809	25	" " bottom same as 1806	880	12.00
1811	12	" " with Automatic Cut-Out	660	12.50
1812	15	" " " " "	660	12.50
1813	18	" " " " "	770	13.50
1814	20	" " " " "	770	13.50
1817	15	" " special broad shape	770	13.50
1818	25	" " with Automatic Cut-Out	880	14.50
1819	20 or 25	pound as ordered, bottom same as 1806	880	14.50



ELECTRIC CURLING IRON HEATER.

A DEVICE far more important to the lady traveller than many toilet accessories, and in all electrically lighted homes it is a necessity. They are fixtures in the rooms of the greatest hotels in this country, such as the Waldorf-Astoria, Hotel Touraine, etc., as well as the more important steamship lines, such as the North German Lloyd, The Hamburg-American Line, Yacht Niagara, etc. There are more than twenty thousand in daily use. The portable types may be attached to any lamp socket, heat quickly, use no more current than an incandescent lamp and render *unnecessary* the use of more or less *dangerous heating devices* in the dressing room, and the tongs are always clean.

When the tongs are removed the current is automatically cut off. When ordering, mention whether Edison, T. H., or Westinghouse sockets are used. One is a package complete, ready for use.

No.		Price
1274	Nickel plated, Marbleized base, 60 Watts	\$3.00
1275	Polished Brass, Marbleized base, 60 Watts	3.25
1276	Nickel plated, White Marble base, 60 Watts	4.00
1277	Brass, polished, White Marble base. 60 Watts	4.00
1278	Nickel plated, with Onyx base, 60 Watts	5.00
1279	Bracket form for Hotel or Steamship use. Prices on application.	
1280	Nickel plated, for theatre use, with grease paint plate, 50 Watts	4.00

State voltage when ordering



HEATING PAD.

ELECTRIC HEATING PAD.

IN form it is similar to that of a piece of thick, soft felt, and by its use heat may be applied in an ideal way to the body. It is light (weighing but a few ounces), clean, safe and free from all the objectionable features of hot water bottles, poultices or other hot applications, and far more effective. It is always ready for use, costs very little to operate, is so constructed that it will last for many years and the first cost is moderate.

The temperature is controlled by the amount of covering placed over the pad — very little being required after the first ten minutes. The maximum heat is limited by a detail of its construction. Its great value in the hospital and cases where hot applications are necessary to sustain life is evident. It is extremely useful as a foot warmer for invalids or elderly people, and proves to be a household necessity where used. Operates on any incandescent lighting circuit. By mail (at your risk) or express at the price mentioned. Guaranteed in every particular.

No.		Watts	Price
681	12x15 inches, complete with 10 ft of cord and plug	50	\$ 5.00
683	15x24 " " " " " " " "	100	10.00

State voltage and kind of socket when ordering.



GLUE POTS.

ELECTRIC GLUE POTS.

JUST what you have been looking for. No fire, no smoke, no dirt, no gases, no danger. It is made entirely of burnished copper, and will last indefinitely. The water bath contains a relatively small amount of water, which is automatically replenished from a reservoir; heated by coil heater, arranged to give three divisions of heat. The maximum to be used to quickly heat the glue, and the minimum is usually sufficient to maintain the glue at the proper consistency. Absolutely no fire risk, as with pots heated by gas or gasoline. This advantage alone is enough to justify a change from the old to the new. Used in many book-binderies, piano factories, brush factories, etc. Pots are made for 52, 100 or 110 volt circuits.

No.		Max.	Watts required		Min.	Price
			Med.			
403	1 pint with reservoir	330	175		85	\$13.00
404	1 quart " "	440	220		100	14.00
405	2 " " "	660	330		170	16.00
406	1 gallon " "	1100	550		275	18 00

Other sizes to order

In addition to the patented glue pot with reservoir we also furnish them without the reservoir. The inner and outer pot is of heavy copper with coiled copper heater, being in every way as substantial and durable as is possible to construct such a device. With this pot it requires from 16 to 20 minutes to have the glue ready for use, starting with everything cold. Much less time is required for the special type, but in no other particular are they superior, while the price is less. In all glue pots the minimum current is sufficient to maintain the glue in proper condition for work.

No.		Max.	Watts required		Min.	Price
			Med.			
407	1 pint	440	220		110	\$10.00
408	1 quart	660	330		170	11.00
409	2 " "	880	440		220	12.50



SOLDERING IRONS.

ELECTRIC SOLDERING IRONS.

IN every factory one or more solderings are in demand for intermittent use and the cost for time in getting them ready, the danger and risk attending the use of flame or charcoal furnace would justify the use of electric soldering irons, were the cost several times as great.

Where soldering irons are in continuous regular use, the advantage is equally as great, for they are continuously supplied with heat. We list three sizes, but make special ones for factory use. All tips are removable.

No.		Price
240	"Light" for small work, size, 1 in. in diameter, 12 in. long, uses 100 Watts	\$7.00
241	"Medium" equal to about a "two pound iron" 1½ in. in diameter, 15 in. long, uses 200 Watts	7.50
242	Equal to about a "three-pound iron" 1½ in. in diameter, 15½ in. long, uses 275 Watts	8.00

ELECTRIC SOLDER POTS.

THERE are many needs for small quantities of melted solder, babbitt metal, and similar alloys which heretofore have required the use of charcoal, gasoline or gas furnaces, that are not only dangerous and dirty but are difficult to maintain at a temperature where the least amount of oxide is formed and yet have the metal in a proper state for use. The electrically heated pots are arranged so that in starting, the metal can be quickly melted, then the current reduced to maintain a uniform temperature at any suitable point.

- | | | |
|----------|---|--------|
| No. 1718 | Solder Pot, 4 lbs. capacity, can be operated from lamp socket. Low Heat (working temperature), 100 Watts medium, 150 Watts maximum (for quick heating), 200 Watts. Price with cord and plug. | \$8.00 |
| No. 1719 | Solder Pot, 10 lbs. capacity, should not be operated from lamp sockets. Sent complete with cord, no plug. Low heat (working temperature) 200 Watts. medium 300 Watts, maximum (for quick heating), 440 Watts. | 12.00 |

BABBITT METAL POT AND LADLE COMBINED.

This device is made for use in shops where small amounts of metal are required at a time where it is desirable to cast the boxes on machinery being assembled. By using long flexible conductors this pot can be used from a central point over a large area and supply hot metal where wanted and when wanted. Made to hold 25 lbs. of melted metal, is complete with handle for carrying and pouring and arranged with suitable legs to set on the floor or bench.

- | | | |
|----------|-----------------------------|---------|
| No. 1717 | 3 heats, Maximum Watts 1200 | \$20.00 |
|----------|-----------------------------|---------|

PITCH KETTLE.

THE heater for melting pitch is arranged for three working heats, a large amount for heating the pitch from the cold, a moderate amount of heat for use when the surface of the pitch is being constantly agitated, a small amount of heat for maintaining temperature when the pitch is not being used. This heater is especially adapted for heating fluids and bodies that liquefy at temperatures not exceeding 500 degrees Fahrenheit. Vessel made of cast iron, finished smooth.

		Watts Required.			Price
		Low	Med.	High	
No. 1651	12 in. diameter, 2½ in. deep,	330	660	1300	\$20.00
No. 1653	15 in. diameter, 2½ in. deep,	400	800	1600	30.00

SEALING WAX POTS.

Where sealing wax is used in quantities, it has been found convenient and much safer to use melted wax for making seals, rather than using a stick in a flame. Pots are similar in form to Solder Pots but arranged to keep the wax at a proper consistency for use.

No. 1715	Capacity ½ pt., 3 heats, 175 Watts max.	\$ 8.00
No. 1716	“ 1½ “ “ 300 “ “	12.00

The working current of above is ¼ of the maximum.
State voltage when ordering.



FOOT WARMERS.

ELECTRIC FOOT WARMER.

THIS device appeals at once to many who suffer with their head bursting from heat in a vain endeavor to keep warm. Improper distribution of heat, floor draughts, the temperature difference between the floor and a higher level, all combine to produce cold feet, and as a sequence, an uncomfortable condition generally. The electric foot warmer exactly supplies the remedy by producing a little heat just where it is wanted, and a high temperature in the room is unnecessary. It is made of cast iron in form to constitute a most desirable foot-rest, finished in black japan, is guaranteed to last for many years, and may be left in circuit indefinitely.

Made in two styles. One, No. 1371, with solid top, designed for a mild foot warmer for continuous use without making the feet unduly warm; the other, No. 1375, in register form, designed for supplying a little heat under a desk or at the typewriter, as well as being a foot warmer. Packed complete with cord and plug.

No. 1371	Requires 50 Watts	Price
No. 1375	" 200 "	\$6.00
		7.00



901 PLUG SWITCH.



904 D. P. CONNECTOR.



908 PLUG SWITCH.

SWITCHES AND FITTINGS.

WITH a view of providing convenient fittings suitable for electric heating apparatus, we have devised the articles listed below. The No. 901 plug switch consists of a double pole fusible cut-out and receptacle for the plug of the switch. By using this device a glance shows whether the heater is connected to circuit, enables the heater to be disconnected and removed at will, and is generally more convenient than other forms of switch. The receptacle is of porcelain with hard rubber cover and rosewood plug.

The No. 905 is similar but of larger capacity; the 908 is a "3-way" plug switch and similar to the others.

No. 904 is a hard rubber double pole connector; 909 is a pair of porcelain sockets with cord for use with appliances having special connections.

No.		Price
901	Plug Switch, complete, with double pole cut-out (Receptacle and Plug) 15 amperes,	\$1.50
902	Extra Plug for 901	.75
903	Extra Receptacle for No. 901, socket and cut-out combined	.75
904	Double Pole Connectors, 15 amperes	2.00
905	Plug Switch, complete (Receptacle and Plug), 30 amperes	2.50
906	Extra Plug for No. 905	1.25
907	Extra Receptacle for No. 905	1.25
908	Plug Switch, three-way (Receptacle and Plug), 30 amperes	3.00
909	Cartridge Connectors for water-heating utensils, per set with cord	1.00
910	Plug only for No. 908	1.25
911	Receptacle only for No. 908	1.75
912	3-way Connector, 6 amperes only	1.50

FLEXIBLE CORD.

Our Twin Conductor Cord, manufactured under Letters Patent, is specially made for the purpose, and has been passed upon and approved by the Board of Underwriters.

TWIN CONDUCTORS.

Made up of No. 34 B. and S. G. wires braided together in proper gauge. Fireproof insulation.

No.	Gauge	Price Per Foot	No.	Gauge	Price Per Foot
921	16	15 cts.	922	14	18 cts.
923	12	20 cts.	924	10	22 cts.

Elastic rubber cord for suspending flat iron cords over tables, 3 ft. long, price 30c.

GENERAL INFORMATION.

COST FOR OPERATING.

THE cost for current for operating electric heating apparatus cannot be easily given because there are many variables which would prevent any definite statement being correct. First, the cost for current varies with the locality; in a city with very cheap fuel and liberal patronage the lighting company can supply at a lower price than where fuel is high and the patronage limited. Second, the amount of current used will vary the cost, as it is the general practice to give discounts for the amount used over a stated quantity. Third, the operators can, in many cases, use much or little to perform the same amount of work. This last statement applies particularly to domestic apparatus — *i.e.*, forty minutes current supply will cook a roast that requires an hour and a half in the oven, yet a careless cook might leave the current on for the full time with no advantageous results. Water can be boiled in a tea kettle with full current in say fifteen minutes, and then kept boiling with one-fourth the full amount. In using a radiator, it may be allowed to run at full load without serious discomfort, yet one-third the full supply would be ample. To enable approximate estimates to be made by those not familiar with electrical terms, we can state that the usual incandescent lamp requires a constant supply of 50 Watts of electrical energy, and to determine the lamp equivalent for any particular article, divide the Watts given in the list by fifty.

Take for example, No. 1726 tea kettle; this requires 200 Watts maximum, which equals four lamps. This amount of current is required for fifteen minutes to boil one pint of water (starting with everything cold) and then by the operation of the switch it can be kept boiling indefinitely, using only 50 Watts, the current required for one lamp. Knowing the cost to operate a lamp for one hour it is easy to compute the cost per hour for operating the different devices, *if run continuously by the hour at a stated load.*

There are many items in the catalogue for use at home, such as the Curling Iron Heater, Seaming Iron, Heating Pad, Small (1720) Stove and Stew-pan, Tea Kettle (1724), etc., that use

so little current that the cost for operating is inappreciable. This applies as well to the Chafing Dish, 5 O'clock Tea and other articles for occasional use.

For summer cooking and laundry use, special rates can always be obtained, and the cost for Electric heat, if care is used, will be found about as cheap as other fuels. Actual experience shows practically no change in the room temperature in summer where Electric cooking, is in process.

TIME REQUIRED.

Stoves and Griddles are ready for use, *i.e.*, have reached a temperature for cooking, in from 5 to 8 minutes from time current is turned on. Broiler, 12 to 14 minutes; Oven, 20 minutes; Farina Boilers, 6 to 8 minutes; Chafing Dishes, 10 minutes; Stew-pan, 5 minutes; Laundry Irons, 8 to 10 minutes very hot; Tailor's Irons, 6 to 12 minutes; Foot Warmers, 5 to 15 minutes; Curling Iron Heater, 6 to 8 minutes; Plate Warmer, 10 minutes; Soldering Iron, 5 to 8 minutes; Glue Pots, 15 to 30 minutes.

To boil water, starting with water and heater cold. Stew-pan (1720), 1 pint 16 minutes; small Tea Kettle (1726), 1 pint 15 minutes; Five O'clock (1872), 1 quart 18 minutes; 6 inch stoves (using suitable flat bottom vessel), 1 quart 18 minutes; Tea Kettle (851), 1 quart 15 minutes, 2 quarts 28 minutes; Hot Water Urns, 1 gallon, one-half full in 35 minutes, full in one hour; 2 gallons, one-half full in 50 minutes, full in 1 hour 20 minutes; three gallons, one-half full in 37 minutes, full in 60 minutes; 5 gallons, one-half full in 30 minutes, full in 55 minutes. Very hot water, about 175 degrees F., can be had in about two-thirds the time stated for boiling. Water heaters can be made to boil the quantities mentioned in about half the time, but the current required would be nearly double that mentioned for any standard articles. Coil heaters when immersed in a covered vessel give the following results, using maximum current, and after water boils will maintain it at the boiling point with one-fourth of the maximum.

No. 470	(400 Watts)	1 pt., 10 minutes; 1 qt., 19 minutes; 2 qts., 35 minutes.
No. 471	(660 ")	1 pt., 7 minutes; 1 qt., 12 minutes; 2 qts., 21 minutes; 3 qts., 28 minutes.
No. 472	(880 ")	1 pt., 5 minutes; 1 qt., 8 minutes; 2 qts., 15 minutes; 1 gal., 28 minutes.
No. 473	(1100 ")	1 qt., 6 minutes; 1 gal., 18 minutes; 2 gals., 35 minutes; 3 gals., 45 minutes.
No. 484	(1650 ")	2 qts., 8 minutes; 1 gal., 14 minutes; 2 gals., 26 minutes; 3 gals., 35 minutes.

Practically the same results are obtained with immersion disc heaters of the same Watt capacity. With nearly all articles special instructions are sent to enable the user to get the best results

INSTALLATION AND USE

In wiring for Electric Heating and Cooking Appliances, the capacity of conductors should be the same as for incandescent lights or conductors using the same current.

Our special Plug Burners No. 905 or No. 905-1 should be used, and the receptacles properly sized. Different enameled plugs for iron sockets must not be used, nor any appliances connected to a lamp socket, unless *expressly specified*.

Flexible Cords must be marked with the apparatus should be used. This cord is made especially for the purpose, and has been specifically approved by the Board of Underwriters.

ALL ARTICLES are marked for the VOLTS REQUIRED. UNDER NO CIRCUMSTANCES SHOULD THE APPARATUS BE USED ON CIRCUITS OF HIGHER VOLTAGE.

In the event of having an accident or accident to operate properly, notify the agent from whom you purchased the device, explaining the nature of the failure so you understand it, but **(X) NOT take it to pieces apart.**

Articles should never be immersed in water, unless intended for that purpose.

Appliances for heating water in which the heating apparatus is enclosed in a coiled tube should be always kept supplied with sufficient water to cover the coil.

Away from the furnace off when the apparatus is put in use.

SPECIAL WORK

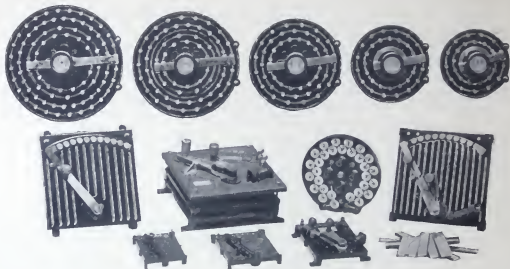
Because current from any source is applied to that device, it can cause all of the heat generated in passing in the work being done it is impossible to say that gas, gasoline, alcohol, and most other things. It is easy to see the possibility of combustion, with the difficulty of application and control and control connected to the mechanical operation of machinery increasing heat. For the latest machine many appliances can be made with electricity for better than by other means. When other methods of comparatively high temperatures are required, applied to a burner, heat, electric heating and heating gases for clamping to operate, are always capable of doing so, and are free of danger, and will be increased from temperatures increase to other kinds of heating.

We have many many electrical appliances in manufacturing and other machinery, and shall always be pleased to give information respect to this branch of work. We control the basic patents on electrical apparatus for electrical work, which enables us to construct the most complete and durable line of electric heaters.

CODE FOR TELEGRAPHING ORDERS.

Send by express the following for	52 volts —	Que.
Send by fast freight the following for	52 volts —	Vac.
Send by express the following for	104 volts —	Quid.
Send by fast freight the following for	104 volts —	Vade.
Send by express the following for	110 volts —	Quail.
Send by fast freight the following for	110 volts —	Valet.
Send by express the following for	115 volts —	Quadrant.
Send by fast freight the following for	115 volts —	Valance.
Send by express the following for	120 volts —	Quote.
Send by fast freight the following for	120 volts —	Valiant.
Send by express the following for	220 volts —	Quadroon.
Send by fast freight the following for	220 volts —	Valentine.
Send by express the following for	500 volts —	Quadrille.
Send by fast freight the following for	500 volts —	Vainly.
For Edison Socket - - - -		Edison.
For Westinghouse Socket - - -		West
For Thomson-Houston Socket - - -		Thomson.

As all articles in the catalogue are numbered the code word and number only need be used in sending an order.



ENAMEL RHEOSTATS—UNIT SYSTEM.

UNIVERSAL FIELD RHEOSTATS.

MOTOR STARTING RHEOSTATS

(plain or with Automatic release).

MOTOR SPEED REGULATORS

(plain or with Automatic release).

THEATRE DIMMERS.

SPECIAL RESISTANCE WORK.

THE immediate success of our Universal Enamel Field Rheostats resulted in a demand for Motor Starters and Theatre Dimmers embodying the same characteristics. The feature of *separate removable sections* enables us to make the most compact, *indestructible* rheostat that can be built, and also to insulate for high voltage

Send for Rheostat lists. We can make prompt shipments of standard apparatus and frequently *supply special work from stock* by reason of the "Unit System."

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A Well-Arranged Ironing Table for Electric Smoothing Irons.



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And other States, find our
Laundry Irons indispensable.

The above shows one of the ironing tables in the Electric Laundry of the Hospital for the Insane at Indianapolis, Indiana. The table is arranged for twelve operators. The central section is ten feet in diameter, from which branch twelve ironing boards, each 4 feet 6 inches by 18 inches. On the edge of the main table at equal intervals are placed 12 cast-iron pedestals, from the top of which extend $\frac{3}{4}$ inch iron pipe bent in the form as shown. Cut outs and switches are placed at the base of the pedestals and the wires lead from there through the pedestals and pipes to the irons.

